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ABSTRACT

This study examined distinctions between self-esteem as a general attitude of self and the underlying self-beliefs which link the self with a positively or negatively valued attribute. It was hypothesized that black adolescents would have higher scores on the general self-esteem measure, while they would not have have higher scores on all specific self-belief components. The overall self-esteem, as well as specific self-belief components were measured in a sample of 305 black and 338 white middle school students in two small southern towns. As expected, blacks had significantly higher scores on self-esteem. However, considerable differences emerged between the two groups on a few specific self-belief components. Greatest differences in favor of blacks pertained to self-beliefs about one's appearance and attractiveness, followed by beliefs about one's physical abilities and academic self-beliefs about reading. The reverse direction was present in relation to self-beliefs that reflected control of events. Smaller internal attributions, greater powerlessness, smaller attributions of success and failure to ability, and greater attributions of success or failure to chance and task difficulty among blacks were examples of these. Although the results provide some support for the hypothesis, the support is not as strong as suspected. There is a need for testing other explanations, such as the possibility of using different self-evaluative frames of reference by black and white adolescents. (Author/LLL)

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Racial differences in the structure of self-esteem in early adolescence: An attitudinal approach to measurement and conceptualization

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ABSTRACT

Racial differences in "self-concept" of adolescents have been found in a large number of studies, but with inconsistent direction. While the black adolescent has been found to have higher self-perception scores in some studies, others have found the opposite. Also, there is inconsistency between studies that employed different operational definitions to measure the self-perception construct. In an attempt to explain these inconsistent findings, Tashakkori and Thompson (1991) have raised a number of methodological and measurement issues in relation to the self-perception construct. One explanation, referred here to as the "construct specificity explanation," is based on a distinction between the self-esteem as a general attitude (evaluation) of self and the underlying self-beliefs. Each of these beliefs links self with a positively or negatively valued attribute (Ajzen and Fishbein, 1980). Measures of "self-concept" in the literature are actually measures of construct components at different levels of specificity within a hierarchical attitude structure. Hence, there are inconsistencies in the findings of studies that use different measures. Based on this explanation, in the present study it was hypothesized that black adolescents would have higher scores on the general self-esteem measure, while they do not have higher scores on all specific self-belief components.

The overall self-esteem, as well as specific self-belief components, were measured in a sample of 643 (305 black and 338 white) middle school students in two small southern towns. As expected, blacks had significantly higher scores on the self-esteem, a difference of approximately half a standard deviation. On only a few specific self-belief components, however, were there considerable differences between the two groups. Greatest differences in favor of blacks pertained to self-beliefs about one's appearance and attractiveness, followed by beliefs about one's physical abilities, and academic self-beliefs regarding Reading. The reverse direction was present in relation to self-beliefs that reflected control of events that happened to self. Smaller internal attributions, greater powerlessness, smaller attributions of success and failure to ability, and greater attributions of success or failure to chance and task difficulty among blacks were examples of these.

Although the results provide some support for the "construct specificity hypothesis," the support is not as strong as expected. There is a need for testing other explanations, such as the possibility of using different "self-evaluative frames of reference" by black and white adolescents. Methodological, measurement, and applied consequences for education are discussed.

Racial differences in the structure of self-esteem in early adolescence: An attitudinal approach to measurement and conceptualization

The literature is not consistent in relation to racial differences in self-esteem and relevant self-perceptions, especially in adolescent and preadolescent population (Martinez and Dukes, 1987: Tashakkori and Thompson, 1991). Although there are frequent reports of the black male's shattered self-esteem and adjustment problems (Gibbs. 1988. McJamerson, 1991), most studies indicate that black adolescents have higher self-esteem than white adolescents. This difference, however, seems to be small in magnitude, about half a standard deviation (Tashakkori and Thompson, 1991). In most studies in this area, self-esteem has been operationalized as a general self-evaluation. Lack of agreement between studies is grater when more specific measure of self-relevant perceptions are used to compare black and white adolescents (Martinez and Dukes, 1987).

The present study is a continuation of previous attempts to apply attitude theory and measurement to investigate self-esteem (Tashakkori and Thompson, 1989, 1991). According to that framework, self-esteem is an attitude about self, and is based on an elaborated set of beliefs about oneself. Each of these beliefs associates (or dissociates) self with a desirable or undesirable attribute. These beliefs have different degrees of salience or importance in any given situation or moment, leading to their differential weight in determining the overall self-esteem. Based on this framework, which is an extension of the Fishbein and Ajzen's (1975) attitudinal theory, black adolescents

have both negative and positive self-beliefs, but might assign weights to different beliefs differently than whites. For example, although beliefs about physical attractiveness are important to both groups, they might be given greater weight in determining self-evaluations than beliefs about personal competence (Wade, 1989).

Tashakkori and Thompson (1991) have presented several explanations for the inconsistency in the literature regarding racial differences in self-perceptions. According to one, which is refereed to in this paper as the "construct specificity explanation," one reason for inconsistent findings is that they operationalize the construct at different levels of its hierarchical structure. For example, in some studies, 'self-perception' has been defined and measured in terms of specific self-attributions such as one's intelligence, academic ability, etc. (Martinez and Dukes, 1987), while some others have defined and measured it in terms of more global self-evaluations, as measured by the Rosenberg self-esteem scale. A third group of studies have considered self-concept a sum total of a relatively diverse set of items about self, which are considered self-beliefs in attitudinal framework presented here. As far as the racial differences in self-perception, its structure, antecedents, and consequences are concerned, the findings of these studies should not be expected to be consistent because their underlying construct is not the same (see Cook and

Campbell, 1979). The present study is an attempt to test the "construct specificity hypothesis." In specific, among a number of questions that remain to be answered in this relation, two are addressed in this study: a)are there differences between black and white pre-adolescents on general as well as specific self-belief components of self-structure, and b) if there are racial differences, on which components are these differences more profound?

METHOD

Respondents: 305 black (146 male, and 153 female), and 338 white (168 male and 170 female) middle school students were studied. These 643 comprised almost all of the entire population of 7th and 8th graders in two small Southern towns.

Variables and their measurement: A two-part questionnaire was presented to respondents in their classrooms. The respondents were instructed to read each question while the teacher was reading it aloud, and respond afterwards. One part of the instrument measured general socio-demographic characteristics as well as reports of respondents' grades during the academic year. The other part included detailed measures of self-beliefs and self-attitudes as follows:

Self-esteem was measured by 5 items from the Rosenberg Self-Esteem Scale (see Robinson and Shaver, 1972). These were as follows: "I take a positive attitude toward myself," "I feel I am

a person of worth, on an equal basis with others," "At times I think I am no good at all," "On the whole, I am satisfied with myself," and "I feel I do not have much to be proud of." These items have been widely used in previous research on national samples of adolescents (e.g. the High School and Beyond project, see Tashakkori, Thompson, Wade, and Valente, 1990; Tashakkori and Thompson, 1991).

Specific self-beliefs: A wide array of component self-beliefs were measured, almost all with more than one item. The items were either modified forms of the ones used in previous studies, or were constructed to represent different components of the self-belief structure. These components, and the items measuring them, are as follows:

1. A modified short form of the Self-Description Questionnaire (SDQ): The SDQ, as described by Marsh, Smith, and Barnes (1983), has been constructed as a multi-dimensional self-perception scale to represent the Shavelson's hierarchical self-structure (Shavelson and Bolus, 1982). In Marsh et al (1983) study, factor analysis of the original set of items lead to identification of 7 major factors, each representing a self-facet. Four of these factors represented non-academic self-perception (physical ability, appearance, relationship with peers, and relationship with parents). The other three represented academic self-perceptions (reading, mathematics, and

general)[1]. In Marsh et al study, items with high loading on each factors (8 items for non-academic, and 10 for academic ones) were retained and reported.

In the present study, for each non-academic dimension 4 items with the highest factor loadings on the pertinent factor were selected. Also, 4 items with highest loadings on reading and math academic factors were selected. Two of these 4 were "affective" items ("I like reading," and "I enjoy doing work for reading"), and the other 2 were "cognitive" items, as reported by Marsh et al ("I am good in reading," and "I get good grades in reading"). Two parallel subscales were also developed for social studies and science, areas of importance in middle school curriculum. The result of all of these were 32 items representing 8 dimensions, 6 of which were short forms of the SDQ. Psychometric properties of this modified form of the SDQ (SDQ-M) has been discussed elsewhere (Tashakkori and Kennedy, in preparation). As far as the current study is concerned, a principal components analysis (SPSS, 1991), rotating 8 factors in a direct Oblimin solution indicated that items were grouped together as predicted from the Marsh et al (1983) report.

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[1] In the theoretical framework of the present study, each of these dimensions consists of a set of beliefs about self. Each dimension is a belief structure relating self to a specific type of attribute. The sum total (or the mean) of all of these beliefs would represent the self-esteem, an attitude about self. Obviously, some of these components are expected to contribute more to the overall attitude than others in different situations. In an academic situation, the academic self-beliefs should be more salient than others. This hypothesis remains to be tested.

Despite the multi-factor nature of the construct underlying the instrument, the overall Alpha for the SDQ-M scale was high (.87).

2. General competence self-beliefs: Seven general competence self-beliefs (Tashakkori and Thompson, 1989) were measured as follows: "I am intelligent," "I can learn new things quickly," "I have a good memory," "I am able to do things as well as most other people," "I am less intelligent than most of my classmates," "I am less successful than most of my classmates," "I can lean almost anything if I set my mind on it," and "I am able to do things as well as most other people." The last item was from the Rosenberg Self-esteem scale. It was decided to include it as a general competence item after examination of the wording. Later factor analysis confirmed this decision. This seven-item scale had an Alpha of .70.

3. Self-beliefs of control and efficacy: Previous research points to high association between self-esteem and self-beliefs regarding control and efficacy (Tashakkori and Thompson, 1991; Tashakkori et al, 1990; Wade, Thompson, Tashakkori, and Valente, 1990). One of the indicators of such beliefs was the general locus of control index, based on the average of two items ("good luck is more important than hard work for success," "planning only makes you unhappy because plans hardly ever work." A third item ("people who accept their condition in life are happier than those who try to changes things") was originally included in this scale, but kept separate later due to low internal consistency of

the scale[2].

Another indicator of self-beliefs of control was a general efficacy score, based on 3 items ("When I get what I want it's usually because I work hard for it," "When I make plans, I am almost always certain I can make them work," "what happens to me is my doing"). An extra item ("no matter how hard I try, things don't turn-out the way I would like), was originally included as a measure of general efficacy. Later internal consistency analysis indicated that this item did not fit in with the other three. It was kept as a separate indicator of 'powerlessness'.

A set of 8 items measured the 'academic attribution style' (adopted from the Multidimensional Academic Locus of Control scale, Lefcourt, 1981). These 8 items consisted of 4 pairs, each attributed the causality of academic success of failure to either the ability, task difficulty, effort, or luck. One item in each pair measured attributions regarding a positive outcome (e.g. getting a good grade); the other measured attributions regrading a negative outcome (e.g. getting a bad grade).

4.General expectancy for success: A preadolescent generalized expectancy for success scale (GESS-adol) was constructed parallel to Fibel and Hale's (1978) adult GESS. Ten items were included in this scale; each measured self-beliefs regarding future success in social and other areas (e.g. future

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[2] For the three-item scale, the Alpha was .18. It increased to .40 after removing the third item.

ability to solve personal problems, reach goals, gain respect, etc.). Three of these items included expectancies for failure. This 10-item scale had an Alpha of .70, and was found to consist of two dimensions in factor analysis (Tashakkori and Hale, in progress).

5. Finally, one items ("I am sad") was included as a measure of general mood self-attributions. Also, there was a one-item measure of popularity ("I am less popular than most of my classmates"). This item was added to the scale to complement the peer subscale of the modified SDQ, mentioned above.

Items were randomly mixed, and presented to respondents in the form of a 3-page questionnaire with 4 columns of boxed options, ranging from always true to always false. The respondents were asked to check one of the boxes, according to the degree to which the statement described themselves. Detailed instructions, and examples, were provided on the cover page, and read by the regular teacher in class along with examples and step-by-step directed practice items. The children were encouraged to ask questions about the task before and during the measurement session.

RESULTS AND DISCUSSION

As expected, there was a significant difference in the self-esteem scores (short Rosenberg Scale) of black and white respondents ($t(639)=6.54$, $p<.0001$). Black respondents had a higher mean (3.22) than white respondents (2.96), confirming the

predictions. With a standard deviation of .50 in both groups, the difference between the black and white means is half standard deviation. This is in line with previous findings among older adolescents in national studies (e.g. Tashakkori and Thompson, 1991). As mentioned before, the average of all SDQ items could also be considered an overall index of self-esteem. The black sample had a higher mean (3.18) on that index than the white sample (2.92, $t(639)=9.05$, $t<.0001$). With a standard deviation of .35 among blacks and .38 among whites, the differences between the two groups is more than .75 standard deviations.

Given these differences in the overall indices of self-esteem, the next question to be dealt with is the degree to which the two racial groups can be differentiated on specific self-belief components. To answer the question, the mean and standard deviation of belief component indices were calculated for the two racial groups (Table 1). A multivariate analysis of variance (MANOVA, SPSS, 1991) was performed on the set of 19 specific belief indices, and indicated the significance of the multivariate test ($F(19,600)=17.87$, $p<.0001$). Univariate tests indicated significant differences in 15 of the 19 indices (math, general efficacy, attributions to task difficulty and luck were the non-significant ones).

As a further step to find-out which components differentiate the two racial groups better when the variation due to others are controlled, a stepwise discriminant function analysis (SPSS,

1991) was performed in which indices representing specific belief components (e.g. competence, appearance, academic abilities, etc.) were tested one by one for significance of differences between the two groups, and entered into the function if they met the .05 significance level for the F. This procedure, which is highly similar to a set of stepwise forward regression analyses, allowed for identification of those specific belief components that discriminated the two groups the best (i.e. the two groups were significantly different on).

Results indicated that 8 of the self-belief indices met the criteria to be included in the discriminant function (canonical correlation was equal to .59). Four of these were self-concept subscales of the modified SDQ. These were as follows (Standardized Canonical Function coefficients in parentheses): appearance (.85), peers (-.34), parents (.21), and reading (.22) Of the other four, one was the general competence (.24). The other three were the general attribution style (-.24, blacks less internal), 'powerlessness' (-.27, blacks more powerless), and self-attribution of ability for success/failure (-.25, blacks less internal). The other components did not add to differentiation of the two groups AFTER these 8 were in the discriminant function. A re-classification of respondents according to the 8 discriminant function coefficients lead to correct classification of 75.5% of the subjects into their correct racial group.

CONCLUSION

As expected, the black children had higher self-esteem scores as measured by the short Rosenberg scale, as well as the attitude obtained from pooling the modified SDQ items. These findings are fully consistent with recent reports among older groups. It is interesting to note that a difference of .50 to .75 standard deviations between the two groups in these overall indices of the self-esteem is comparable to the magnitude of the difference in large scale national samples of older adolescents and young adults (Tashakkori and Thompson, 1991). Comparison of specific beliefs, also, partially confirmed the predictions. Although the black group had consistently more positive scores on the majority of indices, the differences were noticeable on only a few components. Also, the opposite trend was present on components dealing with self-attributions of control over events. These results need some further elaboration.

First, although the black respondents' smaller scores on the control indices are consistent with previous literature in older age groups (e.g. Tashakkori and Thompson, 1991, Tashakkori et al, 1990), they are inconsistent with the literature linking internal locus of control to the overall self-esteem. The pattern of results, however, resembles the one portrayed in theory and research pertaining to individuals under uncontrollable external environmental constraints. For these individuals, an internal locus of control is not adaptive. One implication of all of

these might be that relatively smaller perceptions of internal (self) control over event among the black sample might be a reflection of the socio-cultural constraints the minority adolescents' perceive themselves to face. While this explains the relative external self-beliefs of the black respondents along with high self-esteem scores, it does not explain why the self-esteem scores of this group is consistently higher. This point will be discussed below. There is a need for further studies to measure the degree to which the smaller internal self-control of black adolescents is, indeed, associated with perceptions of uncontrollable external constrains of the environment.

A second point regarding the results is that the black sample's higher self-esteem might be a result of disproportional positive non-academic self-beliefs (physical appearance, attractiveness, popularity among peers,etc.), rather than academic ones. Implications of these results, especially because they are paired with lower attributions of self-control, might be crucial for education of these youth. If the black adolescent maintains his/her self-esteem through non-academic facets, he/she might be relatively less prone to maintain his/her self-esteem through academic achievement.

Finally, none of the points raised above explains the reasons why the self-beliefs of competence, especially competence in academic settings are consistently (but not always considerably) higher for the black group, despite their lower

self-reported academic achievement. The present research was conducted with an expectation to find the black adolescents' more positive self-beliefs than whites in some areas, and their less positive self-beliefs in other areas. This expectation was not supported by the results. In other words, Tashakkori and Thompson's (1991) "construct specificity" explanation is partially supported by differential degree of difference between the groups on certain belief indices. However, the fact that on no specific belief dimension, besides those pertaining to control and efficacy, the white group had more positive scores does not support the 'construct specificity" explanation. Other explanations, such as the one based on "self-evaluative frame of reference" need to be explored in future research. According to this explanation, black adolescents might use a different type of a reference group for comparison, or different sets of standards for self-evaluation than whites.

The results, in general, indicate that the self-perception differences are too complex to be explained by any single explanation. In the process of exploring the adequacy of these explanations, I believe, we will reach a satisfactory body of knowledge to base intervention and preventive strategies for dealing with educational problems of both racial groups.

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Table 1. The mean and standard deviation of the specific self-belief indices among the black and white samples.

	Black		White		
Belief indices:	Mean	SD	Mean	SD	t
Modified SDQ:					
Physical Ability	2.98	.60	2.77	.62	4.32*
Appearance	3.48	.53	2.75	.70	14.88*
Peers	3.40	.53	3.31	.51	2.16●
Parents	3.48	.57	3.23	.65	5.12*
Reading	3.14	.70	2.86	.75	4.97*
Math	3.09	.80	3.02	.77	1.27
Science	2.94	.69	2.76	.73	3.17+
Social studies	2.90	.77	2.65	.77	4.09*
Competence	3.41	.38	3.15	.45	7.81*
GESS-child	3.22	.36	3.07	.38	5.27*
General Efficacy	2.99	.59	2.95	.49	0.79
General Locus	2.40	.63	2.58	.55	-3.89*
Attributions to:					
Ability	2.92	.73	3.08	.63	-2.85+
Effort	3.53	.54	3.39	.56	3.24*
Task difficulty	2.75	.80	2.70	.69	0.77
Luck	2.86	.84	2.96	.75	-1.60
Sad	3.13	.87	2.94	.85	2.83+
Popularity	2.85	.98	2.60	.87	3.43*
Powerless[a]	2.23	.91	2.41	.88	-2.52●

* $p<.001$
+ $p<.01$
● $p<.05$

a The greater the value, the smaller the perceived powerlessness.